

IN THE SPECIFICATION

Please replace the paragraph beginning at page 1, line 11, with the following rewritten paragraph:

The present invention relates to a component holding head, a component mounting apparatus using same, and a method for mounting a component, and in particular it relates to technology suitable for vacuum chucking and transporting an electronic component such as an IC, and mounting it onto a glass liquid-crystal substrate or the like.

Please replace the paragraph beginning at page 2, line 21, with the following rewritten paragraph:

Fig. 3 of the accompanying drawings is an enlarged oblique view of an electronic component 9 in Fig. 2, viewed from the bottom thereof. As shown in Fig. 3, a chip component 92 such as an IC is connected and mounted to the lower surface of a transparent film member 91 of the electronic component 9, a large number of ~~lead~~ leads 91a being connected and formed in an arrangement in which each opposes electrodes of the chip component 92 at the terminal parts of the film member 91.

Please replace the paragraph beginning at page 3, line 15, with the following rewritten paragraph:

The film member 91, which is the base material of the electronic component 9, is a polyimide resin or the like, onto which the lead 91a and positioning marks 91b are formed as copper foil patterns or gilded copper foil patterns. Whereas the polyimide resin base material has a green, brown or orange coloration, the positioning marks 91b and the like, being provided as copper foil or gilded copper foil, make it possible to obtain only a small color gradation difference relative to the positioning marks 91b and the film member 91.

Please replace the paragraph beginning at page 4, line 2, with the following rewritten paragraph:

Fig. 4 is a front ~~elevation~~-elevational view showing a component mounting apparatus 8, this being the type of component mounting apparatus 8 of Fig. 1 in which transmitted light is used to form an image of the terminal part of an electronic component 9. As shown in Fig. 4, in this component mounting apparatus 8, the component holding head 81, which vacuum chucks and transports the electronic component 9, is mounted to a transport arm 83, formed by an X-Y coordinate robot, via the actuating rod 82a of a cylinder 82.

Please replace the paragraph beginning at page 5, line 2, with the following rewritten paragraph:

The image data of each of the positioning marks 2b and 91b obtained by the imaging device 87 are supplied to the controller 86 shown in Fig. 4, and pattern recognition or the like is used to detect the relative position offset. The controller 86 performs control of the transport arm 83 and the substrate placement stage 84 and the like so that this amount of position offset is made zero. By alignment of the relative positions of the positioning marks 2b and 91b, the lead 2a and 91a are made so as to correspond and to connect to each other.

Please replace the paragraph beginning at page 12, line 25, with the following rewritten paragraph:

Fig. 4 is a front ~~elevation~~-elevational view showing a component mounting apparatus 8, this being the type of component mounting apparatus in which transmitted light is used to form an image of an electronic component 9;

Please replace the paragraph beginning at page 13, line 11, with the following rewritten paragraph:

Fig. 9 is a front ~~elevation~~-elevational view showing the a component mounting apparatus to which a component holding head according to a first embodiment of the present invention has been applied;

Please replace the paragraph beginning at page 13, line 14, with the following rewritten paragraph:

Fig. 11 is a partial front ~~elevation~~-elevational view showing the component holding head of Fig. 9;

Please replace the paragraph beginning at page 13, line 23, with the following rewritten paragraph:

Fig. 15 is a front ~~elevation~~-elevational view showing a component holding head according to a second embodiment of the present invention;

Please replace the paragraph beginning at page 13, line 25, with the following rewritten paragraph:

Fig. 16 is a front ~~elevation~~-elevational view showing a variation of the component holding head according to the second embodiment of the present invention;

Please replace the paragraph beginning at page 13, line 27, with the following rewritten paragraph:

Fig. 17 is a front ~~elevation~~-elevational view showing another variation of the component holding head according to the second embodiment of the present invention;

Please replace the paragraph beginning at page 14, line 17, with the following rewritten paragraph:

The first embodiment provides a component holding head, a component mounting apparatus using same, and a method for mounting components, wherein in a component holding head holding an electronic component for mounting the component onto a substrate, deformation of a positioning mark on the electronic component while the component ~~holding~~ holding head holds the electronic component for the purpose of mounting is suppressed, ~~and~~ whereby it is possible to obtain a large, well-contrasted, clear, and accurate positioning mark by an imaging device using transmitted light.

Please replace the paragraph beginning at page 14, last line, with the following rewritten paragraph:

Fig. 9 is a front ~~elevation~~-elevational view showing the a component mounting apparatus having a component holding head according to the first embodiment.

Please replace the paragraph beginning at page 15, line 25, with the following rewritten paragraph:

Fig. 11 is a partial front ~~elevation~~-elevational view of the component holding head shown in Fig. 9, Fig. 12 is a cross-sectional view of the component holding head shown in Fig. 11 from the arrow directions of the XII-XII line, Fig. 13 is an enlarged cross-sectional view of the component holding head shown in Fig. 11 from the arrow directions of the XIII-XIII line, and Fig. 14 is a enlarged view of Fig. 13.

Please replace the paragraph beginning at page 16, line 9, with the following rewritten paragraph:

In the first embodiment, the vacuum chucking holes 811a , as shown in Fig. 13 and Fig. 14, are disposed so as to hold the electronic component 9 by vacuum chucking and so as to be parallel to the peripheral edges of a rectangular electronic component 9 to be vacuum chuck held, and are located on or over straight lines A and B which are substantially orthogonal to each other on or over the positioning marks 91b, 91b, and further disposed at positions that avoid the positioning marks 91b, 91b.

Please replace the paragraph beginning at page 18, line 10, with the following rewritten paragraph:

Even in a case in which the film member 91 held by vacuum chucking is a thin film member, the component mounting apparatus 8 having the component holding head 81 suppresses deformation that can occur in the region of the positioning mark 91b of the electronic component 9, since vacuum chuck holding is done at a position on straight lines those are substantially orthogonal to each other on or over the positioning mark 91b. For this reason, the connection and mounting of the ~~lead~~ leads 91a can be performed properly, without the occurrence of misalignment, enabling the assembly and fabrication of a high-quality substrate with high accuracy.